STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P O Box 176 Jefferson City MO 65102 0176

September 23 1996

Mr Steven Kinser
EPA, Region VII
Superfund Division
726 Minnesota Ave
Kansas City, KS 66101

RE Westlake Landfill Site
Operable Unit 2

Dear Mr Kinser

The Missouri Department of Natural Resources' Hazardous Waste Program, with support from the Division of Geology and Land Survey, has completed the review of the Physical Characterization Technical Memorandum for the subject site The following comments are provided for your consideration

1) Figure 3-2 It is assumed that none of the wells were actually constructed as shown in this figure The use of cement/bentonite grout in the screened interval would be less than satisfactory For a document reviewed by CER and WEH it seems it would have been noticed Please supply individual well construction diagrams for each well in the proposed monitoring network

2) Page 4 14, Deep Salem Formation It is concluded that groundwater flow in the deep Salem Formation is toward the active landfill This was based on water level measurements in the four piezometers surrounding, and adjacent to the landfill, and the leachate collection sumps within the landfill Although this may be true in the vicinity of the active landfill, no data has been collected to confirm this pattern of groundwater movement for the northern and western portions of the site A groundwater divide, similar to the one observed in the unconsolidated material, may be present This comment also applies for the St Louis/Upper Salem Formations

3) Page 4-28, section 4 3 1 It seems unlikely that local (on site) precipitation would have much effect on the stage of the Missouri River Figure 4-34 indicates that on average at the beginning of the month of November precipitation and river stage are trending in opposite directions In other words, local rainfall is increasing and river stage is decreasing

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4) Page 4-29, section 4 3 2 An average of 99,000 gal/day of rain water discharge seems a bit high Please provide some data to support this statement

5) Page 6-3 Alluvial Monitoring Points Except for MW-103, it appears that no monitoring is proposed to the west of the observed groundwater divide This is significant since no hydraulic control has been established at this part of the site Consequently any contaminated groundwater west of the divide is expected to move off-site

6) Page 6-4, St Louis/Upper Salem Monitoring Points No monitoring points are proposed for the northern and western portions of the site This comment also applies for the Deep Salem Monitoring points

7) Page 6-7 Leachate Monitoring Locations It appears that LR 102 will not be monitored The rationale for excluding this leachate riser from the monitoring network is not provided Also please refer to comment No 5

If you have any questions regarding these comments or if I can be of any assistance to you please feel free to contact me at (573) 751-3176 Thank you for the opportunity to review this document

Sincerely,

HAZARDOUS WASTE PROGRAM

Jalal El-Jayyousi
Environmental Engineer

JEJ rw

c Ward Hurst, Golder Associates Inc
Michael Siemens, DGLS

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FAX Transmittal Cover Sheet

Date of Fax 9-23-96

- ☐ URGENT
- ☐ Priority
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- ☐ As Requested
- ☐ FYI

To Steve Kraus) 913-551-7063
Ward Hesat 314-936-1135

From Jalal El-Sayyousi

FAX ____ Phone ____

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COMMENTS Hard copy to follow)

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